

Date:
User:Wednesday, 3/8/2006 10:37:59 AM
Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SHROUD ASSEMBLY
Job Number	: 26111		
Estimate Number	: 12200		
P.O. Number	: N/A	Part Number	: D346717
This Issue	: 3/8/2006	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Number	: D3467 REV.A
First Issue	: N/A	Project Number	: N/A
Previous Run	: N/A	Drawing Revision	: A
	Type : PURCHASED PARTS	Material	: N/A
Written By	: <u>SEE COMMENT BELOW</u>	Due Date	: 3/31/2006
Checked & Approved By	: <u>06.03.08</u>	Qty:	10
Comment	: est rev. A 06.02.06 new issue EC	Um:	Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 OUTSIDE SERVICE OUTSIDE SERVICES



Comment: Sub-Contracting Issue P/O: 00000768 AP 06/03/09
 Email or Ship DXF file to vendor
 Laser Cut per Dwg D3467 flat pattern D3467-17F
 Material release note required

2.0 D346717F TOP COVER FLAT PATTERN



Comment: Qty.: 1.0000 Each(s)/Unit Total: 6.0000 Each(s)
 DOUBLER FLAT PATTERN

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

4.0 QC6 DIMENSIONAL CHECK

**Comment:** DIMENSIONAL CHECK

5.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1

**Comment:** SMALL & MEDIUM FAB RESOURCE 11-Deburr SAD 08.08.22 (10)






2-Bend as per dwg D3467

SA 06/03/24 (10)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/03/29
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/03/24	5	1 piece was scrap out of tolerance		destroy		 06/03/24	 06/03/24	 06/03/24

NOTE: Date & initial all entries

Date: Wednesday, 3/8/2006 10:38:00 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHROUD ASSEMBLY

Job Number: 26111

Part Number: D346717

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Boles 29 (9)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

Boles 29 (9)

8.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Boles 29 (9)

Job Completion



u 06.03.29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

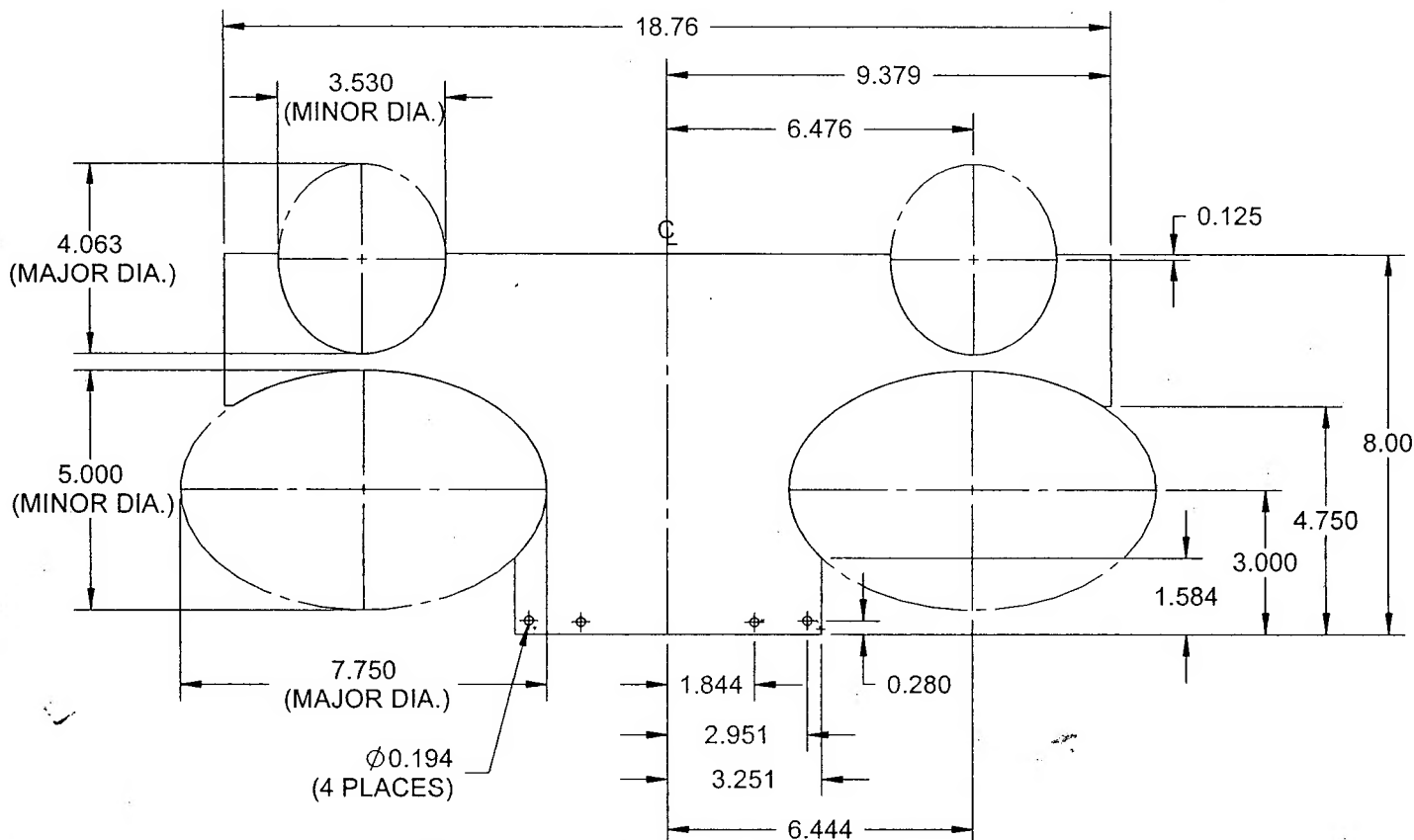
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

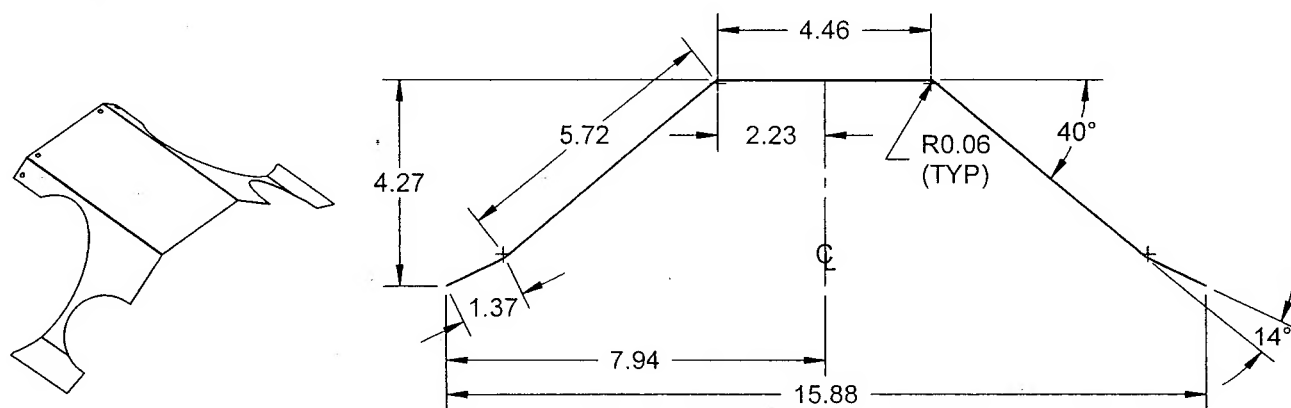
NOTE: Date & initial all entries

PRELIMINARY ISSUE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3467	REV. A
DATE 05.12.07		TITLE SHROUD ASSEMBLY	SHEET 14 OF 15 SCALE 1:4



D3467-17F TOP COVER FLAT PATTERN



D3467-17 TOP COVER BENDING DETAIL

NOTES:


- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
26 GAUGE SS (0.018 THICK)
(REF. DART SPEC. M304S26GA)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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3/17/06

604-946-453 ATTN: PETE

		AK Steel Corporation Metallurgical Test Report Coshoccon Works Coshoccon, OH 43812		Page 1											
				Lead No. 7410672 SEN No. 7410672											
INTEGRIS METALS PO BOX 340 MINNEAPOLIS, MN 55440	INTEGRIS METALS 306 'B' STREET ALBURN, WA 98001	MILL ORDER NO. 77255-0191 PROCESSOR ORDER NO. 427135-01 BUYER'S ORDER NO. 427135-01		PART NO. 74251497 ENGLISH UNITS - PRODUCT - METRIC UNITS 316/304 X COIL											
SKID ID	PIECE	HEAT	PARENT COIL ID	NET WEIGHT											
SKD713143	1	7250151	0540919-02	8,145 LBS. 4012 KG.											
SKD713144	1	7250151	0540919-01	8,170 LBS. 4013 KG.											
SKD713145	1	7250151	0540919-01	8,321 LBS. 4048 KG.											
SKD713149	1	7250151	0540919-02	8,401 LBS. 3,892 KG.											
TOTAL SKIDS	TOTAL PIECES			TOTAL NET WEIGHT											
4	4			35,948 LBS. 16,075 KG.											
L-Cable Analysis of Heat P-Product Analysis of Parent Coil CHEMICAL ANALYSES															
ID	C	MN	P	S	SI	CR	NI	MO	N	CU	CO				
L 7250151	.049	2.39	.027	.001	.35	18.18	8.05	.35	.04	.30	.12				
SHIPPING DATE: 09/13/2005 REMARKS: NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.						PRODUCT DESCRIPTION OR SET TYPE 304 STAINLESS #28 FINISH SLIT EDGE * AMS 5512 & ALL TECH REQS HAVE BEEN MET UNLESS NOTED TO OR NOTED OTHERWISE * A STM & 240 -04 EX PARA 3.1.1 ELONG WILL BE DETERMINED BY ASTM E 8 * ASTM & 490 -01 EX PARA 19.1.1 ELONG WILL BE DETERMINED BY ASTM H & S EX PARA 25.1.1.3 COIL WILL BE TAPPED ON OUTSIDE ONLY * ASTM & 666 -03 * IN-011 Rev 0, * IN-011 0 * BUYER PART# 74251497 * ASME SA-240 SECTION II PART B (2001 ED., 2002 ADDENDA) EX PARA 3.1.1 ELONG WILL BE DETERMINED BY ASTM E 8 * EX-10204 3.1.1									
PARENT COIL ID	FOR (E/T)	DIR (L, T, D)	COND	% ELONG 2 INCH MEASURED	TENSILE STRENGTH (KSI)	YS. % OFFSET (KSI)	ROCKWELL HARDNESS T ₀₁	ROCKWELL HARDNESS P ₀₁							
0540919-02	T	T	ASTM	71.0	95.2	27.1	72	74							

*** CONTINUED ON NEXT PAGE ***

3/17/2006 1:57 PAGE 001/002 Fax Server

Ryerson

F-597

T-726 P.007/015

263-288-3888

FROM INTEGRIS

MAY-17-2006 10:05

03/17/2006 14:36 FAX 604 946 4153
03/17/2006 14:18 FAX 604 272 9137INDUSTRIAL LASER CUTTING
INTEGRIS METALS002
001/004

Fax Server

T-726 P.008/015 F-527

002/004

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 1
Heat/Lot : 86K8
TIN : B42748

Sold To: INTEGRIS METALS, LTD.
7910 4TH STREET SE
CALGARY, AB T2C2Y3

Ship To: ***CUSTOMER PICKUP***
4375 14TH STREET NORTHEAST
CALGARY
ABT3E7A9

Vendor Information

Cust PO #: 406824

Cust PO DT: 11/03/05

Specifications

STAINLESS STEEL SHEET, COLD ROLLED, ANNEALED AND PICKLED.
ASTMA240/04a 480/04a,666/03,ASMESA240/04-A05,480/04-A05,SA666/04
Q08766D-A X 1/8 PRM,AMS5513H X MRK&FIN,MILS059D,AMD3,X CRWN MRAS
CORROSION: ASTM A262/02aB;180Bend-OK
Buyer Part: 4288441
304 2B .1305 IN 48 IN 96 IN
Country of Origin: UNITED STATES

Mechanical Tests

		UOM	L	O	UOM	L	O
Yield Strength - 0.2% Offset	40	KSI	F	TRANSV			
Tensile Strength (UTS)	93.3	KSI	F	TRANSV			
Rockwell B	85		F	TRANSV			
Pct Uniform Elong 2 In/50mm	57.01	PCT	F	TRANSV			
Rockwell A	85		T	TRANSV			

Chemical Composition

C	Carbon-Pct	.059	CR	Chromium-Pct	18.360
CU	Copper-Pct	.342	MN	Manganese-Pct	1.643
MO	Molybdenum-Pct	.285	N	Nitrogen-Pct	.037
NI	Nickel-Pct	8.150	P	Phosphorus-Pct	.029
SI	Silicon-Pct	.289			

Comments

1002
0004
003/004

INDUSTRIAL LASER CUTTING
INTEGRIS METALS

03/17/2006 14:37 FAX 604 946 4153
04/20/2015 08:27 FAX

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 2
Heat/Lot : 86K8
TIN : B42748

Material free from mercury contamination. No weld repairs.
EN 10204 3.1 PED 97/23/EC Annex1, Para. 4.3 QQS763F Cond A
This document certifies the material has been tested in
accordance with applicable specifications described herein
and has met those requirements.

QA by ERIC HESS 02/01/2006

Miscellaneous Data

GUKLPH , ORN: K123
Control #: 50C60214
Part #: 74270441
.135 X 48 X 96

Date: 03/17/06

SOLD TO: INDIAN LAKE

TO 110880

S/P 90-374786 - 02

Edg 3/17/06

The Chemical Analysis and Mechanical Test
data was received via EDI from the above
mentioned vendor.

INTEGRIS METALS, LTD.

